THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 3. BALTIMORE, MD. MAY 15, 1838. Vol. V.

☞ This publication is the *successor* of the late AMERICAN FARMER, and is published at the office, at the *N. W. corner of Baltimore and North streets, over the Patriot office*, at TWO DOLLARS AND FIFTY CENTS *per annum*, if paid within one month from the time of subscribing, or $3 if after that time. All letters to be post paid.

BALTIMORE: TUESDAY, MAY 15, 1838.

SPRING WHEAT.

The editor of this paper will thank those gentlemen to whom he sent parcels of Spring Wheat, who may not yet have paid him, to remit him as early as possible, the sums by them respectively due him.

LIMING.

We are gratified to learn that this mineral is pushing itself into the favor of agriculturists in every direction of our country, and that its effects, where properly used, have been of the most decided and beneficial character, operating with equal service upon sandy as upon clayey soils, producing wherever tried a most salutary change not only in texture of the soil but in its productiveness.

CLOVER SEED.

From the greatly increased use of clover seed, we think it eminently worthy of machinists to try their skill in the discovery of some cheap and *simple machine* for cleaning it. Such an invention would not only prove highly valuable to farmers, but would, if the machine was afforded at a *moderate price*, be a source of great emolument to the inventor. The great price at which labor-saving machines are generally held, tend very much to restrict their use, and we have always thought those holding rights but ill consulted their interest by demanding such extortionate prices for their machines—the turnip drill, for instance, would long since have been in the hands of almost every farmer, but for this very circumstance.

AGRICULTURAL SOCIETIES' CONSTITUTIONS.

As there are now several Agricultural Associations in a course of organization, we have thought it would be promotive of the object to transfer to our columns the form of a Constitution, which will be found in another column, and would merely add, that we think an additional article of the nature of the one which we append to this paragraph, should be engrafted in every constitution which may be formed:

"ART. —. Every member of this Society shall at each annual meeting, produce an essay or communication upon some subject connected with husbandry or horticulture, descriptive of some experiment which he may have made, or giving the process and result of some crop which he may have made, which said essay, communication, or description shall be published in some agricultural paper, to be selected by the society."

If this plan was to be adopted, a fund of agricultural information would be gotten together of the greatest interest to the country, and surely it will not be said that such a requisition would impose too much *trouble* on the members, for there are rainy days enough in each year when such employment would be a source of delight to the farmer and planter.

THE RIGHT SPIRIT.

We publish the following Circular of the Trustees of the Massachusetts Agricultural Society to show to our readers the deep interest manifested by the officers of this old and justly valued institution in the improvement of agriculture. Such attention to this important branch of industry is entitled to every praise, and will not fail to exert an influence upon the happiness, comforts and resources of the people of that State of incalculable value, as nothing can be truer than the assertion that wherever you see a community emulous of distinction in the arts of husbandry you will find them in the possession of the elements of real prosperity.

PREMIUMS OF MASSACHUSETTS AGRICULTURAL SOCIETY, FOR 1838.

THE BEST CULTIVATED FARMS.

The Trustees, with a hope of further awakening the attention of the farmers of Massachusetts to a sense of the importance of good cultivation, and at the same time of exciting an honourable competition for exhibiting the best cultivated farms, have decided to appropriate to this object *six hundred dollars* of the funds entrusted to them, the present season, as follows:—

For the best cultivated farm of not less than 70 acres exclusive of wood land, regard being had to the quantity of produce, the manner and expense of cultivation and the general appearance of the farm, $200 00
For the next best, 175 00
For the next best, 150 00
For the next best, 57 00

To obviate the objections which some claimants for premiums may have to making a written statement of the condition, products and management of their respective farms, as heretofore required, the Trustees propose to relieve them of this trouble by an inspection, either personally or by an agent, of the farms which may be offered for premium.

The person or persons making the inspection, will require of the respective owners or occupants of farms, answers to the following inquiries:

Of how much land does your farm consist exclusive of wood land?

What is the nature of your soil; does it consist of sand, gravel, clay, loam or peat?

If of a part or all of the above kinds; what do you consider the best method of improving them?

How many acres do you till, and how many cart loads of manure (meaning by cart loads thirty bushels at least,) do you generally put on acre?

Is your manure applied in its long or green state, or in compost?

Do you spread and plough in your manure, put upon fields to be planted with corn or potatoes, or put it into the hills?

What is your method of ploughing and cultivating green award?

How many acres of upland do you mow, and what is the average quantity of hay upon an acre?

How many acres of grass land do you irrigate; at what season; and how long do you allow the water to flow your land, and what is the effect?

Do you manure the land irrigated, or any other land you mow, how much to an acre, and what kind of manure do you put on?

How many acres of low land, not suitable for the plough, do you mow and what is the quality and quantity of the hay cut the present year?

What is your method of reclaiming low, bog or peat lands, and what has been your success?

How many acres of corn have you planted the present season; what was your mode of preparing the ground and the seed, the kind and quantity of manure used to an acre, the manner of applying it, and the quantity of corn raised to the acre?

How many acres did you plant with potatoes

the present year; what was your method of planting, your manner of cultivating, and what the average quantity raised on an acre, and what kinds did you plant?

What number of acres of other vegetables did you plant, what kinds, and how many bushels of produce had you to the acre, and to what use shall you apply them?

How many acres of Winter or Spring grain did you sow the present year; how was the ground prepared; what quantity of seed did you sow on an acre? If you have raised wheat, of what kind; the nature of the soil, and was it sown with or without using lime?

How many acres have you laid down to grass the present season, at what time in the year did you sow it, how much seed to the acre, and was it sowed alone or with a grain crop?

What are your means, and what your manner of collecting or making manure?

How many oxen, cows, young cattle, horses and sheep do you keep through the year?—What is the size of your barn or barns; and have you a cellar under them; is your manure covered?

Are your cows of native, foreign, or mixed breed?

What is your management of calves intended to be raised?

How much butter did you make this year, and how much cheese, and what proportion of it new milk?

How many swine did you keep, what quantity of pork did you make, and of what breed were your swine?

What do you feed them upon through the summer months, and on what do you fatten them?

How many cart loads of manure do you take from your hog styes in a year, and of what materials is it made?

What number of hands is employed on your farm, and what do you pay for labor?

What is the number of your Apple trees, and are they of natural or grafted fruit trees?

What number of fruit trees have you exclusive of Apple trees?

Have your trees been attacked by canker worms or borers, add what is your method of destroying them?

In the cultivation of your farm, do you allow the use of Ardent Spirits?

The Trustees are desirous that these questions should be answered with as much particularity as possible. The applicant will not however be required to answer them under oath, but according to the best of his knowledge and belief.

The Trustees hope and believe that by the method proposed, many important facts may be elicited, and the farming community enabled to derive much useful information from the skill and experience of practical farmers.

N. B. Claims to be addressed to Benjamin Guild, Esq., in Boston, before the first day of October next.

Form of the Application.

To Benjamin Guild, Esq. Boston.

Sir,—The subscriber, living in the town of —, hereby makes known his intention of applying for premium for the best farm, and offers the same for inspection.

HISTORY OF CULTIVATION OF SPRING WHEAT.

By the Rev. Hy. Colman, Commissioner of Agricultural Surveys of the state of Massachusetts.

(CONCLUDED.)

Manures for Wheat.—A new theory of vegetation has been suggested by some distinguished European philosophers, which professes to approach nearer to a solution of this great mystery than has yet been reached.

"A new substance has been discovered in all soils and manures, which is denominated *humin* or *geine*. It has been found likewise in all barks; in saw-dust, starch, and sugar. Humin is a substance not unlike carbon, for which it has hitherto been mistaken. It combines with the salts and forms the humic acid. There is a strong analogy between humin and other nutritive substances, such as gum or fecula. It forms a humate with an alikali, which is very soluble in water. All substances which contain carbon are dissolved in the water of vegetation through the means of humin; and the dissolved mass is taken up by plants as food. Humin in combination with lime, ammonia or potass also becomes soluble in soils or dung. Humic acid and carbonic acid gas mixed with water, according to this discovery, constitute the chief food of plants. Every description of manure is only valuable in proportion as it contains these substances.

Such is the modern theory of vegetation; which is in itself plausible, but which will be farther tested by the lights of chemical science; from which examination the best results to agriculture are to be expected. Lime causes the evolution or extraction of this matter from various substances. Potash leads to similar results, and with more power than lime and bone manure; and night soil and all animal manures are supposed to furnish humin or geine in abundance. In respect to night soil or human excrement, a discovery has been recently made in France, which promises valuable results. The charcoal procured from burning wood, peat, or coal in close vessels has been mixed with it in the form of a fine powder, which operates to disinfect it of all offensive ordor, and reduce it to a powder, which is portable and may be easily distributed. I have seen this process perfectly effected in the course of an hour. Manures in a decomposed and fermented state are said to supply this humic acid much more abundantly than in a crude or fresh state. In what precise condition they are best applied must be matter of farther inquiry and experiment; and depend somewhat on the mode of their application. If designed to be spread broad-cast and ploughed in, experience seems decidedly in favor of applying them in a green and unfermented state; but its as well decided that green and unfermented manure should never be brought in immediate contact with the roots of a growing plant.

Limes are found of various qualities from their different measures of combination with sinceous, argillaceous, or magnesian earth. Magnesia is found combined with some of our lime-stones in considerable quantities; and when in great amount is deemed prejudicial to vegetation. The quality of our various lime-stones is of great importance; and this will soon be furnished to us by the highest authority.

The Grain Worm.—There is another circumstance deserving of particular attention. In many parts of the country the wheat crops have been destroyed by what is called the Grain Worm; (the *Cecidomyia tritici.*) A small black fly, in immense swarms, is seen hovering over the wheat fields, in the season of flowering, and deposits her eggs upon the plant, which presently produce small orange-colored maggots, which are found in the grain and entirely destroy it. This worm is first spoken of as appearing in England, in 1796; and afterwards prevailing to a great extent in 1828, and producing the most severe losses in the crops. No certain preventive has yet been discovered. The worm appears in the season when the wheat is in flower; and some farmers have professed to find a perfect security by sprinkling their wheat fields at this time, when wet with dew or rain, with finely powdered lime, at the rate of a peck, and in some cases a bushel, to the acre. Other farmers have failed in this application; but whether the application was made at a proper season, and under proper circumstances, is not determined. An intelligent farmer in West Newbury, the present season, assures me, that he applied it to his fields, which escaped the ravages of the insect, while the fields of his neighbors adjoining his suffered severely Facts are far more valuable then mere hypothesis, and though enough may not have been as yet accumulated to decide this matter, yet what has already taken place is sufficient to encourage farther trials. A perfect preventive against this alarming depredator would be worth millions to the country and the world. The thorough liming of the soil has, without doubt, a beneficial influence in destroying the germs of insect life.

In several remarkable cases, where wheat has been sown very early or very late, it has either passed beyond the season of liability to injury from the fly before his arrival, or his season of doing injury has passed away before the wheat has come into a condition to be injured by his attacks. The season of injury is at the time of the flowering of the wheat. The wheat crop above referred to, planted late in May, escaped to a great degree; the crop sown in June entirely escaped his depredation; though other crops in the vicinity, in a different state of forwardness, severely suffered. I lay the case fairly before the farmers, and must leave the decision to themselves.

Diseases.—Of other evils to which the wheat crop is exposed, I shall add little to what I have already stated. If the rust and mildew are parasitical plants like the smut, the seeds of which, by means which no sagacity has as yet discovered attach themselves to the wheat plant, it is certain, from the fullest experience, that the development is particularly favored by certain conditions of the weather; and that they seen, in most cases, contemporaneous with the presence of heavy dews and hot, steaming, sultry fogs. Sure preventives in this case are not known; but I recur again to an important fact, stated in relation to this subject in my First Report on the Agriculture of Massachusetts: I mean the case of two farmers in the

vicinity of each other, whose wheat fields, in respect to soil, aspect, seed, preparation and cultivation, seemed precisely alike. The field of one was severely blighted; the field of the other yielded a fine, healthy, plump grain; and the only circumstance of difference of treatment in two cases, which I could ascertain, was, that the owner of the latter field, for several mornings during the continuance of the damp and foggy weather, and when this grain was covered with a heavy honey dew, caused it to be swept and the moisture shaken off by drawing a rope over the standing grain.

Harvesting.—In respect to harvesting the grain, experience and observation are best able to decide the proper time of cutting. It is better to gather it early rather than late. When suffered to stand until dead ripe, much of the grain will be lost in the field. When gathered early this loss is prevented, and the grain be heavier and fairer. An eminent English farmer states his saving by cutting his grain early as, in his opinion, equal to one fifth. The general rule to be givn is, to cut the grain when the culm or stalk under the ear appears to be dead; but in this case it will need some "making" in the field.

Of the mode of gathering, cradling, as it is termed, is preferable to reaping, where the grain is not lodged; but what is called a Scotch bow; of which some account is given in the N. E. Farmer of 2d August last, has been found as efficient and useful in a careful hand as the best formed cradle. It is simply a hoop bent in an elliptical form, and firmly attached to the snaith, by which the grain is received after it is cut, and deposited by the mower as regularly as with a cradle. The advantages, which it presents over the cradle, are, that the expense of it is trifling, as any farmer can make it; it is very light; and it can be used with ease by any one who understands the proper use of a common scythe. It was introduced into Maine by one of the most intelligent and public spirited farmers in that state; and has been spoken of the past season with the strongest approbation.

Sowing Clover with Wheat.—I add, in conclusion, to every farmer, who proposes to sow wheat, my advice to sow with his wheat a few pounds of southern clover. It will not injure the growth of the wheat. It will protect the land from the effects of drought after the wheat crop is taken off; and should he choose to continue the cultivation of the field, the land will be enriched by the ploughing in of this green crop with the stubble, to an amount vastly exceeding the cost of the seed and the expense of the sowing. On such a clover ley gypsum may be ordinarily applied to great advantage; and I have known lands thus managed gradually made better, even after a repeated succession of grain crops, without any other manuring than the gypsum applied to the clover and the ploughing in of the clover and the stubble. Some experiments in Berkshire County induce the conclusion that the clover should not be turned under in a state of great luxuriance or succulence; but rather in a decayed or matured state. This point deserves observation and experiment.

This is the year for the re-appearence of the "seven year locusts," their last appearance having been in 1831.

[From the Genesee Farmer.]

MANAGEMENT OF HARD-PAN SOILS, OR GRASS LANDS.

We believe it a settled principle, in all the present approved systems of agriculture, that to produce the grasses or herbaceous plants, commonly used for feeding cattle and sheep, it is necessary to plough and cultivate the land occasionally, and would be, if our object was the *graminee*, or food used for the sustenance of man. This doctrine, it is true, is not the doctrine popular among that large class of farmers who have many tomorrows in their calendar; but it is, we apprehend, the only system that will furnish us with profitable crops. We admit, in its fullest extent, the position that grasses being generally cut before ripening their seeds, do not exhaust the soil of its productive power as much as grain; and may, therefore, be continued from year to year without the same amount of injury; and we are willing to go further, and admit that in cool and moist climates, grasses adapted to the soil, may be continued by top dressing with calcareous matter and manure, for a succession of ages; but we greatly doubt whether it pays the expense, and in neither case is it as productive as in a course of alternate husbandry. Fields which have been long continued in grass, do not indeed become entirely naked and devoid of vegetation, even with close pasturing, because nature exercises more kindness and care over our race, than to permit the total destruction of the means of subsistence; and she, therefore, supplies other kinds of grasses than those we cultivate, mingled with all the weeds and rubbish of the neighborhood. And we can aver with still greater certainty, that the grasses produced with ploughing and tillage, will never compare in nutritive properties with clover, or the other grasses commonly used in a course of alternate cropping. It is indeed a matter of deep regret, that in the vast variety furnished from the magazine of nature, our knowledge of the most nutrient herbage is exceedingly limited; but it is not the less our duty to apply what knowledge we possess to useful purposes. We know that clover, orchard grass, and some other varieties, which can only be produced by tillage, have a tendency to fatten cattle, and that all the grasses having that tendency in the greatest degree, are artificial or cultivated, and not the natural productions of the soil. The former do appear when first sown, and when the roots have fresh pulverized earth to shoot in, and they would entirely destroy or supersede the latter, but the trial comes when they have both been in the same pasture or meadow several years, when the fibres from long growth are matted together, and the cultivated grass has met with powerful neighbors to dispute every inch of ground. We see that if orchard grass or clover, if left to defend themselves under such circumstances, are very soon overpowered—in a few years they become sensibly diminished, and plants of a hardier race, or that are more congenial to a close and compact state of the soil uniformly take their place.

Grass lands, on this side the Atlantic, when continued long in a state of sward, become filled with such a multifarious, incongruous, heterogeneous mass of plants, that it is a perversion of language to call them grass; red-top, cow-grass, rib-grass, quack-grass, goose-grass, cow-slips, butter-cup, daisies, dandelions, strawberry-vines, and many other tyrannical usurpers fill the land, which, under the alternate system, would be occupied with the most beneficial and nutritious food. We read sometime since in a British publication, a fact showing that we are not speaking at random, when we alledge the same results from similar causes in England, where the lands are continued in that state for hundreds of years, at a heavy expense to the proprietors, of manuring, weeding and dressing. Thomas White, Esq., a resident of the county of Norfolk, with a view of ascertaining what kinds of food were growing upon his sheep pastures, when on a superficial examination, appeared filled with white clover, at the suggestion of the celebrated Bakewell, who told him his pastures did not furnish nutritive food for his flocks, procured from nine different spots as many different pieces of turf, dug up about six inches square; he planted them in his garden, and in an incredibly short space of time found that respectively produced as follows:

No. 1.	14	different	kinds	of grass and weeds.
2.	5	"	"	"
3.	10	"	"	"
4.	3	"	"	"
5.	7	"	"	"
6.	5	"	"	"
7.	9	"	"	"
8.	6	"	"	"
9.	15	"	"	"

Now, if these facts are admitted, and we see no reason to doubt them, we arrive at the conclusion, that grass lands must be ploughed, and the artificial or cultivated grass seed supplied, or the annual loss must be continually increasing. If it *must* be ploughed, we consider the whole argument conceded; because, whether fit for grain, for root crops, or for nothing at all, the expense of ploughing is incurred, and surely some crop ought to be attempted. (*a*)

In the cultivation of the soil, the Bountiful Giver of good permits us to possess and enjoy his benefits, although claimed for their exclusive use by the other members of the family. We have never yet planted Ruta Baga without obtaining over 1000 bushels to the acre; and thanks to General Barnum, we are annually raising from 5 to 700 bushels of potatoes from the same extent of surface. Our wheat crop has never yet failed upon our turnip or potatoe ground, nor even upon clover sod when properly prepared and *limed*, and we want no better illustration of the utility of our plans, than the one drawn from the Norfolk system of husbandry, or proof of the natural adaptation of our lands to the purposes for which we have used them.

We are asked to furnish a mode of changing the texture of the soils under discussion, and of rendering them friable and productive; it would better have suited our notions of procedure to have first established the fact that they required alteration; and we ought, at least, to have been furnished with an analysis before we were called upon to name the constituents that would supply the deficiency. (*b*) As, however, it seems to be admitted that in parts of Cayuga and Tompkins, the necessity for making any change does not exist, because the heavy clays of those sections are al-

ready filled with lime and siliceous matter, which make them crumble to pieces when exposed to the influence of the atmosphere, the request may be considered as already answered; if lime and sand have this effect, the object is accomplished; if any deficiency of these essential earths exist in other places, supply them. Our analysis shows, as others probably would show, a deficiency of the lime but not of the sand; this deficiency we are all busily engaged in supplying, and we should be exceedingly gratified if the Editor of the Farmer, or any of his correspondents, would enable us to compare our own analysis with the south-eastern part of Cayuga and Tompkins counties, where they are not modified by the proximity of the lake.

We have no objection to the term 'indurated clay,' nor any doubts of the existence of such a substance; but we doubt the propriety of its application to any considerable portion of the surface soil, of New England, New-York, or the northern counties of Pennsylvania; 'indurated sand' would be quite as near the truth. That there are such spots, of very limited extent, is probable; but the term 'hard-pan lands' is applied, with few exceptions, to all the lands having a retentive subsoil, whether that subsoil is composed of argillaceous materials, or of cemented sand and stones, and very frequently when the surface soil contains no injurious proportion of either the one or the other; and this is especially the case when this subsoil is within two feet of the surface.

We may, perhaps, be exposing our ignorance, (*c*) but we must frankly acknowledge, that we have never known such a substance as hard-pan, or if it is a more philosophical expression, a mixture of indurated clay and sand so near the surface, as to impede the operation of the plough, excepting always immediately under the cradle knolls, which in New-York and northern Pennsylvania deface the surface of some of the finest lands in America. If there is any considerable body of such lands, the cultivation and improvement of them must depend upon their constituents, and ought not to be attempted without ascertaining what they are.

We have always attributed the existence of hard-pan under such knolls, to the circumstance of its being placed beyond the reach of frost and solar heat; nor have we known it to continue long in possession of its indurated properties, or even its name, after being exposed any considerable time to their pulverizing power, but ultimately becoming friable and absorbent. This desirable result would unquestionably depend upon its constituents, and is greatly facilitated by the addition of lime. A very intelligent man at our elbow, who is perhaps too much given to generalizing his thoughts and expressions, and who may perhaps attribute too much to the influence of frost and calorie, is firmly of the opinion, that if we were deprived of their aid, the whole country, surface and subsoil, would become 'hard-pan.' He draws this conclusion from a careful examination of the upper and lower stratum, and the operations of heat and cold upon the latter. We could furnish a large amount of evidence, that the hardest of the hard-pan, when thrown up from the bottom of cellars, wells and ditches, and mixed with 10 per ct. of lime, or any other substance calculated to loosen its tenacity, has become more permanently productive than the vegetable mould around it; and we are convinced that many of those subsoils, where they do not contain more than 20 to 25 per cent. of alumine, if turned up in the fall, and not worked in the spring until fully dry, become very soon sufficiently pulverized to produce almost any kind of crop. This treatment we know has been successful when applied to the upper soil, which seldom contains more than 15 per cent. of clay, and hardly ever less than 70 of sand.

Our advice, then, to the occupants of hard-pan lands would be—if your land is too wet, drain it; if it is too dry, moisten it with applications of gypsum and ashes; if hard and difficult to work, lime it; but never hesitate to plough it when it begins to show a diminution of the crop. It *will* bear potatoes, ruta baga, and every other production necessary for sheep and cattle husbandry; if clovered and limed, it will bear ploughing, fallowing and alternating as well as other stiff soils; every succeeding crop will be improved by the green sward being ploughed under, by increasing the absorbent power, and diminishing the cohesion, by pulverizing and opening the land to gaseous and atmospheric influence; and if it will bear nothing but white clover, (which we must be permitted to say is an unnatural partiality,) the succeeding crops will pay the expense three-fold.—This rule, however, must not be applied to land bearing good crops; it is a folly to plough a sward yielding two or three tons per acre in hopes of obtaining a better. HOLKHAM.

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NOTES.

(*a*) There certainly should be some crop not only attempted, but grown in such cases, and we will inform Holkham how some farmers in New England, who are occupants of hard pan soils, and who cannot afford the heavy expense of procuring lime to change their lands, manage, when they wish to renew their grasses for mowing or for pasture; and we have known the same method adopted in this state, under the same circumstances, with success. The ground is well manured on the surface, and then the turf is turned carefully and completely over, well rolled down, a light harrow passed over the surface until the dirt is loosening and the interstices all filled, (brush is sometimes used instead of the harrow;) on this surface, so smoothed and levelled, the oat, barley, or spring wheat is sown, and with this grain the grass seeds required to renew the turf and furnish a new vegetation, free from weeds or foul matters, are put in. Where materials are at hand for altering the character of the soil, and rendering it friable, such as lime or sand, the foregoing may not be the best methods of treating such soils; but that they may thus be kept in good nutritive grasses without frequent or long continued plonghings, does not admit of a doubt.

We may remark here, that if foreign authorities could be allowed to settle a question of this kind, the evidence in favour of permanent pastures or mowings on such lands would be decisive.—"Grass lands on tenacious clays, or heavy loams, when brought, in a succession of years, or perhaps of ages, into a state of great productiveness, cannot be ploughed up without the risk of great injury, and are more profitable in the production of herbage than they could be in grain." (London.) Marshall affirms, "that permanent pastures feed cattle to a greater weight; that the grasses are more nutritive both for sheep and cattle; that milch cows fed upon them give richer milk, and make more butter and cheese; that the herbage is sweeter and more easily digested; and that such permanent grass lands yield a large profit at a small expense."

(*b*) Holkham is right here; and nothing but inadvertence prevented the request being accompanied by the following analysis of two kinds of soil, one of loam, and the other of hard-pan, both from different parts of the same field. On the loam, the hard-pan is 18 inches below the surface, and as the field has been frequently sown, on this part wheat or clover has never failed, or frozen out. The hard pan part has been cultivated the same as the other, but wheat nearly always fails, and red clover always is frozen out.—Heavy oats have been grown upon it, but roots of no kind will succeed well upon it, or similarly constituted soils. In this part the plough uncovers the hard-pan.

Loam.		*Hard-pan*	
Silica, . . .	69	Silica . . .	58
Alumine, . .	15	Alumine, . .	31
Carb. Lime,	6	Carb. Lime,	8
	90		92

(*c*) We read this remark of Holkham to an intelligent farmer, who said that he had acres where the plough would uncover the hard-pan at the ordinary depth of ploughing, and that Holkham must be very little acquainted with the argillaceous region of New York, not to have observed numerous instances of the same kind. We do not attribute this mistake of our correspondent to ignorance; but to a forgetfulness of the difference in the geological structure of the argillaceous zone of Western New York, and the sandstone formation of the southern part. The reports made by the gentlemen employed in making a geological survey of this state, would have refreshed his memory, and pointed out to him the source of some of his misapprehensions.

We are somewhat surprised, that Holkham should have demurred at our recommendation of altering the texture of clay or hard pan lands by the addition of sand. We proposed this method, because we knew it had been successful in England;—we had seen its beneficial effects on the tenacious clays of Albany Co.—we had tried on our own farm the addition of sandy loam to hard pan, with the most decided and lasting benefit,—and we have read in the 4th vol. of the Gen. Farmer, page 381, the following from an authority that we presume H. will not dispute. "Silex is probably the best mixture that can be applied on a farm consisting chiefly of alumine, because it is by far the cheapest, and few farmers can afford to apply other manures in sufficient quantities to diminish the cohesive, and increase the capillery attraction to a proper extent, but when the sand is well mixed with the clay, the soil is prepared for retaining what further manures may be applied."

It was our intention to have accompanied this paper with some remarks on the points in our correspondent differed most from the opinions advanced by ourselves, particularly the nature of our hard-pan soils, and the kinds of grass best adapted for the culture of such soils, with the reasons for such preferences; but the above analy-

sis compared with Holkham's, will show the essential difference between his hard-pan and ours, and render apparent the necessity of a somewhat different treatment. As the influence of the substratum on the character and quality of the soil formed above it, does not appear to be generally appreciated by farmers; and as the Western District is by nature divided into zones of remarkable regularity which exhibits this influence most clearly, we may at some future time endeavor by description and analysis to show these differences, and their effects. The necessity of a proper attention to subjects interesting to all, in a periodical like ours, and the space already occupied by the subject of soils and hard-pan, will prevent for the present the prosecution of our purpose.

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LARGE CROP OF CORN.

Mr. Tucker,—I will give you an account of a piece of Corn, I cultivated last season. The ground had laid in pasture seven years. It was thinly spread over with fresh stable manure, and on the first of May it was turned over very smoothly, and harrowed lightly till all the crevices were filled. On the 5th of May it was planted two feet and a half one way and three feet the other, with the common eight rowed yellow corn, tarred and rolled in plaster. It germinated readily, and gave a healthy, promising appearance through its whole stage of growth. We hoed it, or went through it, twice, and stirred the earth thoroughly, destroying all weeds; the second time pulled out all but four of the healthiest and thriftiest looking plants in each hill. I dispensed with the old fashioned custom of "hilling up," as not only useless and unnecessary but fatal and injurious in its consequences. From a measured half acre 103 bushels of ears were produced.

R. H. SHELDON.

Brutus, March, 1838.

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MADENSS IN HOGS.

Mr. Tucker,—Some time in July 1837, I observed my hogs were seized with *symptoms of madness*, and died daily. I left some 15 or 16 head of very fine shoats. A neighbor passing one day, observed that it was the effects of *green buckwheat*, to which they had recourse. I closed my fences, and since that time I have lost no more hogs.

Believing that the above is not generally known, and also that it may be of utility to the agricultural community, you are at liberty to publish it in your valuable paper. Yours, respectfully,

WM. McCAUGHEY.

Wayne county, O. March 31, 1838.

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MANUFACTURE OF BEET SUGAR.

An address was delivered in this town a few days since, on the subject of manufacture of Beet Sugar, by Mr. Childs, who has spent some months in Europe. He alluded to the German method, lately discovered, which has been patented in every country in Europe. Some of our shrewd ones went to work, and the result of their "experiments" will be found in the Hampshire Republican which accompanies this. Yours, &c.

H. FERRY.

Northampton, April 15, 1838.

The German improvement over the French method of making beet sugar, a patent affair in Europe, consists *simply in drying the beets*, which are then reduced to a powder by grinding, and changed into a decoction by adding water. The experiment has been thoroughly tried by Mr. ZACHARIAH WILDER, of this town, which resulted in *common success.* Mr. W. by this process, which, we understan ', is as simple as that of making a cup of tea from aromatic herbs, has succeeded in extracting *ten per cent. of sugar from the crude beet*—and he is confident that at least *twelve per cent.* can be obtained at another experiment.

For his efforts in prosecuting his experiments to signal success, Mr. Wilder deserves the unqualified thanks of the agricultural world. The result of his labors will give an impetus to the culture of beets in Hampshire county, which cannot fail to be productive of lasting good. But to the process again. The dried powder of the beet was found to yield its saccharine immediately, as the decoction was found to be as sweet boiled as maple syrup, the moment the water was added to the powder. The means used for the clarification were very simple. Animal charcoal and lime were the only agents employed. This eminently successful experiment proves the fact, that the immensely important article of sugar can be manufactured by any intelligent farmer's household, as easily as bread, pies or cakes can be made baked. A rich garden spot of a quarter of an acre, can produce beets enough to make a thousand pounds of sugar; no heavy capital or incorporated company is required to carry on the business. Every individual can make a pound of Indian meal. This important fact has just been proved. Now let us look at the amount of sugar brought into Northampton last year. Why, it amounted to *one hundred and seven thousand pounds*, which togother with molasses consumed, would cost over $10,000. This is no inconsiderable sum to be expended by our citizens annuolly. A dozen resolute farmers, by their *influence* and labors combined, can create that sum from their lands this summer in the culture of the beet. At least, so we think.

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LARGE CROP OF CORN.

MR. TUCKER—Please say to the readers of your paper, that from my observations of the White Flint 8 rowed Corn, I think it is at least two or three weeks earlier than most of the varieties planted in this region. Mr. Elijah Humphrey of Caledonia, raised of the White Flint last year, 110 bushels to the acre. The same piece of ground has been planted five years in succession, but was manured well each year.

I will at some early day give my plan for raising bees. I have abandoned the house plan, and would say to those who think of adopting that method, that unless they can take away all the old comb annually, they will not succeed.

OLIVER ALLEN.

—

It has been suggested to us that the publication of the form of a Constitution for a County Agricultural Society, would promote the formation of more societies. The following form has been drawn up by an intelligent officer of an Agricultural Society and politely furnished us. It is believed that the execution of its provisions will secure the objects desired. Of course the societies will decide themselves, whether they will become auxiliary to the State Society; though it is to be hoped every one in the State will.

CONSTITUTION

Of the —— Agricultural Society, auxiliary to the Kentucky State Agricultural Society.

The style of this Society shall be the —— County Agricultural Society, designed to improve the condition of Agriculture and the Mechanic arts.

ARTICLE 1st. This society shall be composed of such persons as shall subscribe to this constitution, and contribute to its funds one dollar annually, and of such persons as the society shall elect honorary members. The payment of ten dollars or more at one time shall constitute a member for life, exempt from all further contribution.

ART. 2nd. The officers of society shall be a President and three Vice Presidents, a Secretary, a Treasurer and an Executive Committee, to be chosen annually.

ART. 3rd. All the officers shall constitute a Board of Managers for the general administration of the affairs of the society, with power to enact such by-laws as may be expedient, subject to the revision of the society; a majority of them to constitute a quorum.

ART. 4. The President, or in his absence, the senior Vice President shall preside in all the meetings, fairs, &c. of the society. He shall have power to convene special meetings of the society, to appoint agents and committees to effect its proper objects; to take charge of and distribute all plants, books, seeds, &c. which may be presented to the society; to prepare and publish all communications to or from the society in such time and form as may best promote its object and success.

ART. 5th. The Secretary shall keep a full and complete record of all the proceedings of the society, and shall conduct all its correspondence.

ART. 6th. The Treasurer shall collect and keep all the funds of the society, shall disburse them on the order of the society or the President, and shall make a report to the society of all receipts and expenditures, at each annual meeting.

ART. 7th. The Executive Committee shall consist of five persons, whose duty it shall be to prepare suitable places for all the meetings, fairs, &c. of the society, to marshal and conduct all processions, to arsange all articles for sale or exhibition, and to assist in the preservation of order and collection of revenue, under the direction of the President.

ART. 8th. The Society shall meet on the—— day of—— in each year, when a Fair for the exhibition and sale of domestic animals and for articles the produce of the farm, garden or work shops, be held, and premiums awarded and distributed; on the succeeding day a meeting of the society shall be held for electing officers, and for selecting judges, offering premiums, enacting rules and fixing the place for the next fair. At this meeting also, any communication from the State Society will be attended to, and the pecuniary concerns of the society audited and published with the general proceedings.

ART. 9. No person, except life members, can compete for premiums without contributing at least $1 anually to the funds of the society.

ART. 10. In rendering descriptions of objects for premiums, competitors shall be put upon their veracity, and in addition to their own written statements, shall produce other satisfactory evidence, if required; and any person shall be forever debarred all the privileges of the society who shall be convicted of wilful false description.

ART. 11. This society will be auxiliary to the Kentucky State Agricultural Society, according to its provisions, and will exchange reports, &c.

ART. 12. This constitution shall be amended only by a majority of two-thirds of those attending an anual meeting.

PATENT BANKING AND DITCHING MACHINE.

We had an opportunity of seeing on Monday, in full operation, a machine for digging ditches, and at the same time making embankments or dykes, which surpasses any thing of which we had formed any conception. The contrivance consists of a wooden foundation of about twelve feet in length, at one extremity of which are two uprights. In these uprights an axle revolves, on which are two arms of cast iron, having at the extremity of each a cross-piece furnished with four or five teeth, as they may be termed. Inside of these cross-pieces are buckets that receive the earth loosened by the teeth, and, as the axis revolves, deposite their contents on an inclined platform, from which the earth passes and forms an embankment on one side of the ditch. The axle is made to revolve by means of cog wheels connecting it with the gearing. This gearing consists in part of an iron shaft that passes horizontally and a little obliquely in front, and is turned by a capstan. The capstan is provided with a long horizontal arm to which the horse, by which the whole machine is set in motion, is attached. In acting upon this arm the horse walks around the capstan and crosses of course the line of the ditch, but in advance of it. In order to give direction to the machine and prevent it from being drawn aside there are two guide wheels with sharp edges in the forward portion of the foundation, that cut the sod to the depth of about eight inches. The ditch on which the machine was employed when we saw it, was three feet deep, and three feet and a half wide at the top. It was excavated in an uncommonly hard virgin clay soil, such as is found on the high ground between Fell's Point and the Canton race course. At every revolution, each of the buckets is capable of taking up which the teeth above mentioned go, is graduated at will.

We were much surprised at the rapidity and perfection with which the excavation was formed, one foot of finished ditch of the breadth and depth mentioned, together with the dyke, being formed in a minute, or sixty feet in an hour. It is calculated that a single horse of ordinary strength can propel the machine during ten hours of each day, consequently the extent of trench formed would be six hundred feet. To give an accurate description of this surprising process within the limits of a paragraph, cannot be done, and, we must therefore request such as may wish to form a just conception, to witness the performance. In ditching and draining low lands, or dividing prairies where wood is scarce and the soil light or moist, the machine will prove invaluable. The inventor is Mr. GEORGE PAGE, of Keene, N. H. who, as we are informed, undertook to make something answer the purpose at the suggestion of a gentleman at Washington, whose residence is where much draining is required, and but little wood grows. Mr EDWARDS, agent for the Sandwich and Boston Glass Company, will furnish any information required.—

The above machine has been made for Col. S. D. Wilkens of this city, for the Territory of Wisconson, in the prairie parts of which it must prove invaluable.

CULTIVATION OF THE DAHLIA.

This flower has lately been called the Georgina, but without good reason, as there is no other called the dahlia. It is a native of Mexico, but has been brought to such perfection in England, that it is more indebted to that country than to the land of its birth. The climate of the United States is strikingly congenial to its habits, and it grows with great luxuriance: the difference existing in that particular, between growing here and in England, is very remarkable. In a respectable English catalogue, the height of the Alexandrina Victoria is stated to be three feet; while in this country one of the same flower have often exceeded twelve feet. If there is no error in the English statement, the difference appears to be almost incredible. It has become quite fashionable, its many fine qualities and striking beauties having brought it into deserved estimation. When the weather gets warm, about the end of April and beginning of May, you will observe the young shoots which have forced their way through the old stem which is left with the root; split this down, so that a shoot may remain with each piece. Plant in a rich soil in the borders three feet apart, or in clumps, selecting a variety of colors, and placing the tallest growing kinds in the centre. Put the root two inches below the surface, and if it has but one good eye it will make a prettier plant than when it has more. After it has grown about three feet, take some day when the ground has been softened by rain, and drive in a stout stick, from six to ten feet long, about eighteen inches into the ground, near each plant; but take care not to let it be so close as to injure it; or the sticks may be put in at the time of planting. Let the stick be made from 1½ inch plank, planed smooth, with a pointed and notched head, and painted green. The branches of the dahlia are extremely brittle; and if your garden is exposed to the sweeping winds which often occur in the fall, you must tie every branch very carefully to the stick; this will alway be the safest plan; otherwise the expectations of a year may be laid prostrate in an instant. Sometimes a few forward buds will open their premature beauties to the burning beams of a July or August sun, but their lustre is quickly dimmed. The latter end of September, some seasons all October, and some times part of November, witness the dahlia in all its glory. The brilliancy of the flowers may be preserved for several days, by shading them. Some of the kinds are inconceivably splendid, and no flower exhibits such a variety of all that is rich and magnificent in colors. What a pity it is, that with all its desirable properties, it should be so tender. The frost operates upon it like a pestilence, and when that has taken place, the stem must be cut off two or three inches from the ground, and after a few days the root taken up and exposed to dry for some time, then cover it well in *dry sand*, and put it away in the cellar to remain through the winter. A few very dwarf kinds may be planted in pots; but generally they look unsightly, and do not thrive so well as in the open ground.

A GOOD WAY TO ENCOURAGE THE GROWTH OF SILK.

A number of gentlemen, inhabitants of Massachusetts, Connecticut and New Jersey, have requested the American Institute, by letter, to offer a premium at their next Annual Fair, for the greatest quantity of Sewing Silk to be raised on not less than one-sixteenth of an acre of land by a succession of crops to a single season. Satisfactory evidence to be given of the same to the managers of said Institute on or before the next Fair, together with the weight of mulberry leaves consumed, the weight and number of cocoons produced, and the weight of leaves which may from necessity be borrowed from any source to complete the experiment, to be certified to the Institute on oath or affirmation.

To enable the American Institute to carry this proposal into effect, they have forwarded a joint and several obligation payable on or before the first day of October next, for One Hundred Dollars.

At a late meeting of the Institute, the proposal was unanimously accepted. Silk is one of the articles of foreign growth which has been imported of late years to an enormous amount. Measures like the foregoing, calculated to abridge our wants, is, in our opinion, much better than borrowing specie of the Bank of England, which, in the present state of things, is only calculated to enable them to sell us more goods and again stop our career of prosperity whenever they please.—If our influential fellow-citizens will follow the above example, we may soon become exporters instead of importers of Silks. We think editors of papers disposed to encourage the growth of silk and thereby contribute to the independency of our country, will do well to publish the foregoing. It is a good example. Other useful productions may be encouraged in the same way.—*N. Y. Star.*

[From the Bucks County Intelligent.]

CANADA THISTLE.

There are a great variety of thistles, some are annual—some biennial and some perennial. The two first kinds may be easily destroyed by cutting them down with hoes or mowing before the seed ripens, they are but very little in the way of the farmer, do but little injury to the land and generally looked upon as an evidence of the goodness of the soil. But those that are perennial are very difficult to extirpate, and cannot be destroyed but by a total eradication of the root with all its fibres or by destroying them in the ground. The Canada Thistle is a perennial plant, strikes its root deep into the ground from one to two feet in one single stem with joints one or two inches apart from which small fibres shoot out—from three joints there will spring up new tops if the upper part is cut off or the root broken and any of the joints left in the ground—when it grows with grain or tall grass such as Timothy, in a good

soil, it throws up generally one stalk from 18 to 20 inches high on the top of which it has a head like the common thistle but smaller and with smaller seeds of the same shape and color, with a down attached to the end of which the wind carries the seed and spreads it abroad—where it it grows by the road side or in pasture fields it branches and spreads out a bushy top, the leaves smaller and more numerous than the common Thistle and every leaf is covered with small and very sharp spikes, like needles.

Some years ago I discovered the Canada Thistle on my farm among the Oats; when cutting it the seed was ripe and most blown away from the head, the next year the field was laid down in grass, the Thistle came up very thick, I concluded to destroy it if possible. I had the ground dug up 12 inches deep about a rod square where it grew the thickest; all the roots gathered out that could be found and burned. After lying a few weeks, the Thistles came up very thick from the joints of the broken root that were left in the ground—I then had about two barrels of fish pickle and three bushels of salt put on well mixed with the ground, all this did not destroy the Thistle, it came up from the broken roots that were still left in the ground and grew, but appeared weak and unthrifty—as we did not dig up the whole ground containing Thistle I adopted another experiment to destroy it. My farmer took a grubbing hoe and stuck it into the ground about three inches from the plant and part of the root with the sod, then put a handful of coarse salt into the hole, took the root out of the sod to its place,—in no instance did the root shoot up again, but perished where it was cut off at or near the centre of the hole, the salt gradually dissolving for months completely destroyed it. The seed being spread by the wind over a considerable space of ground, the Thistle continued coming up every summer for three years, and as often as new plants came up they were dug up and salted, by which means the Thistle was totally eradicated. This appears to be a tedious and protractive mode of destroying it, but it is effectual, and one man can destroy a great many plants in a day. The Thistle has been brought from the State of New York into this country by sheep, the seed getting mixed in the wool is carried by them and scattered over the country; it is also brought in Timothy seed.

BUCKS COUNTY.

MAINE TAKEN A NOBLE STAND.

What is more cheering and praiseworthy, than to see a State throw off the sluggish mantle of unconcern which has bound her so long, and stand forth the true and enlightened champion of her own interests? We have repeatedly referred in our paper, to the bounty which the Legislature of Maine, granted last year on the raising of Wheat, that cost the State upward of a hundred thousand dollars; and we now have the satisfaction of publishing the following from the "MAINE FARMER," from which it will be perceived that not only has the bounty on Wheat been continued another year, but the Legislature has also granted a bounty on Corn, a measure which, we have not the least doubt, will be attended with the most beneficial effects.—

"The Legislature of this State have not only renewed the bounty on wheat for the coming year, but also added a bounty on corn. The provisions of the Act give a bounty of one dollar to the man who shall raise ten bushels of wheat, and six cents a bushels for all above until it amounts to two hundred bushels, and three cents for all above.

"For thirty bushels of good sound ears of corn, two dollars—for every three bushels above thirty and up to sixty, ten cents, and two cents for every three bushels above. There were few opposed to this measure, but the decided opinion of a large majority was, that as Maine COULD raise her own bread, she MUST raise it—and that it was better, far better, to spend a million among her own people to bring this about, than to send FIVE out of her territory as she has done every year for many years past for that which she could produce herself.

SALE OF EXTRA STOCK.

TO be sold by Public Sale at Carrollton Hall, on Elkridge, the Farm of John Mactavish, Esq., seven miles from Ellicott's Mills, on Tuesday the 29th of May 1838.—viz.

10 Milch cows from 3 to 7 years old,
4 Steers 2 years old,
2 Bulls 1 year old, nearly full Durham.
2 Steers 1 year old,
3 Heifers 1 year old.

With the exception of a few of the Milch Cows, the whole of the above stock are the get of "Young Malcolm," the finest Improved Short Horn Bull in Maryland—and are from ½ to 7-8 Blood.

Will be sold at the same time, 2 young Boars—one a full bred Russian, Sale to commence at 10 A. M.

Terms Cash, or Notes at six months with approved Security and Interest.

may 12 JOHN MACKENZIE, Manager.

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street, near Pratt, three doors* in the rear of *Dinsmore & Kyle's* Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends *keeping*, at all *times*, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN; CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS, HARROWS, STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durding & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,
Grant street, 3 doors in the rear of Dinsmore & Kyle's.

GROUND PLASTER OF PARIS,

Of superior quality, in bbls. on hand and for sale by
JONA. ELLICOTT & SONS,
may 8 3t south end of Pattersonst.

ROBERT SINCLAIR, Jr. & CO.

Light street, near Pratt street Wharf,

OFFER FOR SALE, an extensive assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS and SEEDS, comprising all that are required to stock the most extensive plantation. Particular attention is directed towards the manufacturing department, where the most competent workmen are employed and durable materials used.

The assortment of PLOUGHS is large and various, among which are the Double mould board, Sub-soil, Self-sharpening, Improved Davis, &c.

WHEAT FANS—Com. Dutch, Crank Shake, and Watkins' Patent.

CORN SHELLERS—For manual and horse power, warranted to shell 2 a 700 bushels of corn per day.

CORN AND COB CRUSHERS—For breaking the cob in suitable size for feeding stock.

CYLINDRICAL STRAW CUTTERS—of these there are several sizes. The late improvements made have rendered them the most perfect and effective Straw Cutters in the country.

THRASHING MACHINES and Horse Powers.

CULTIVATORS, for cultivating Corn, Tobacco, &c.

DRILL and SOWING MACHINES, for drilling vegetable and grass Seeds.

VEGETABLE CUTTERS, for slicing turnips, mangel wurtzel, pumpkins, &c.

HARROWS—Expanding, Com. Square and Diamond shape.

GREEN'S PATENT and common DUTCH STRAW CUTTERS.

ALSO,

Grain Cradles and Grass Sneaths, with warranted Scythes attached, Sickles, Scythe Stones, Grain and Hay Rakes, Hay and Manure Forks, with 2 a 6 prongs, Ox Yokes, Grubbing Hoes, Docking Irons, Ames' Spades and Shovels, cast steel Axes, Bramble Hooks, Hay Knives, Box, Pruning and Sheep Shears, Grass Hooks, Pruning Knives, Children's Spades, and various other Garden Tools.

☞ Merchants wishing to purchase Ploughs and Castings to sell again, will find it to their interest to examine our stock, being the largest and most general assortment in this city, and for sale on liberal terms.

GARDEN & FIELD SEEDS—Just received from Europe, and from the Clairmont Seed Gardens near this city, an extensive assortment of Garden and European Field Seeds, warranted fresh and genuine, viz.

French Sugar Beet Seed, Mangle Wortzel, Ruta Baga, superior Beet and Radish Seeds, early and late Cabbage Seed, 30 kinds early and late Peas, bunch and pole Beans, Hybrid and other Turnip Seeds, Cauliflower and Broccoli; Scotch Kale, Parsnip, Carrot, Cucumber, Lettuce, Onion, Summer and winter Squash, Melons, Leek, Celery, Ockra, Salsafy Cress, superior assortment of Flower Seeds, Herb Seeds, etc. etc.

FIELD SEEDS—English and Italian Ray Grass, Trefoil, Burnet, St. Foin, Lucerne, white and red Clover, green and blue Grass, early Potatoes, Gama Grass Roots, Baden and Mercer Corn, Italian and Tuscany Wheat, Timothy, Herds and Orchard Grass, Millet, etc.

TREES AND PLANTS supplied at the shortest notice from the Clairmont Nurseries, near this city.

☞ Wanted, prime lots Seed, Grain and Grass Seed.

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of *one thousand*, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeve, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

CONTENTS OF THIS NUMBER.

Spring wheat—liming—clover seed—Agricultural societies' constitution—the right spirit—premiums of Massachusetts agricultural society, for 1838—history of cultivation of spring wheat—seven year locusts—management of hard-pan soils, or grass lands—large crop of corn—madness in hogs—manufacture of beet sugar—large crop of corn—Constitution of the —— society, auxiliary to the Kentucky S. A. Society—patent banking and ditching machine—cultivation of the dahlia—a good way to encourage the growth of silk—Canada thistle—Maine taken a noble stand—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	7 00	8 50
CORN, yellow	bushel	75	76
White	"	75	76
COTTON, Virginia,	pound	10	12
North Carolina,	"	—	—
Upland,	"	10	12¼
Louisiana —— Alabama	"	—	—
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 25	dull.
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"	—	—
Super How. st. from stores	"	7 50	—
" " wagon price,	"	7 25	—
City Mills, super	"	7 75	—
" extra	"	8 00	—
Susquehanna,	"	7 75	—
Rye,	"	4 75	—
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	—
GRASS SEEDS, wholes. red Clover,	bushel.	8 00	8 50
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 00	3 50
Orchard,	"	2 50	3 00
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	34	—
PEAS, red eye,	bushel.	—	—
Black eye,	"	75	1 00
Lady,	"	1 00	—
PLASTER PARIS, in the stone, cargo,	ton.	3 50	3 75
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	85	90
Susquehannah,	"	—	none
TOBACCO, crop, common,	100 lbs	3 00	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	9 00
Rappahannock,	"	—	—
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	1 65	1 70
Red, best	"	1 55	1 60
Maryland inferior	"	1 40	1 50
WHISKEY, 1st pf. in bbls.	gallon.	33	—
" in hhds.	"	34	—
" wagon price,	"	bbls	30
WAGON PASSAGE, to Pittsburgh,	100 lbs	1 50	—
To Wheeling,	"	1 75	—
		washed.	unwash
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	13	13½
Shoulders, do	"	11	—
Middlings, do	"	11	—
Assorted, country,	"	10	—
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	30 00	40 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 68	—
CHOP RYE,	"	1 50	1 62
EGGS,	dozen.	12½	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	—
No. 2,	"	6 50	—
Herrings, salted, No. 1,	"	3 00	—
Mackerel, No. 1, —— No. 2	"	8 75	11 00
No. 3,	"	5 75	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	
Other Branches,	do	Bank of Virginia,	
MARYLAND.		Branch at Fredericksburg,	
Banks in Baltimore,	par	Petersburg,	
Hagerstown,	½a	Norfolk,	
Frederick,	do	Winchester,	
Westminster,	do	Lynchburg,	1
Farmers' Bank of Mary'd,	do	Danville,	2
Do. payable at Easton,	do	Bank of Valley, Winch.	2
Salisbury, 1 per ct. dis.		Branch at Romney,	1
Cumberland,	par	Do. Charlestown,	par
Millington,	do	Do. Leesburg,	do
DISTRICT.		Wheeling Banks,	2
Washington, Georgetown, Alexandria,	Banks, ½p.c.	Ohio Banks, generally	3¼a4
PENNSYLVANIA.		New Jersey Banks gen.	3
Philadelphia,	par	New York City,	par
Chambersburg,	½	New York State,	do
Gettysburg	do	Massachusetts,	3a3½
Pittsburg,	2½	Connecticut,	3a3½
York,	½	New Hampshire,	3a3½
Other Pennsylvania Bks.	2	Maine,	3a3½
Delaware [under $5]	4	Rhode Island,	3a3½
Do. [over 5]	1½	North Carolina,	5
Michigan Banks,	10	South Carolina,	6a7
Canadian do.	10	Georgia,	8
		New Orleans	8a10

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from $4 to $15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis'," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from $15 to $50 each, warranted to separate the garlic from the wheat; Corn Shellers, from $12 to $20; Cutting Boxes, from $7 to $50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again—nails which will be furnished on the most pleasing terms and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

☞ We would particularly call the attention of *Country Merchants* and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled *entire* all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURDING & Co.

SUPERB DOUBLE DAHLIAS.

ALSO, GARDEN AND FLOWER SEEDS.

The subscriber offers for sale at his establishment the best collection of Double *DAHLIAS* offered to the public, and will warrant every root true to name and colour, but they are too well known to need any comment in their favor, as most all amateurs in the vicinity have seen them in bloom to their great satisfaction, so those who wish to have roots that are genuine, apply at the right place, and lower than any other in the city as to quality.

Besides he offers a general and good collection of *Garden and Flower SEEDS*, fresh imported, that cannot be raised to perfection in this country; he has selected from Europe, and will dispose of them on reasonable terms, with a general collection of Greenhouse, Herbaceous and hardy plants, also Bulbous Roots. Catalogues can be had at his establishment, corner of Pine and Lexington street, Baltimore, by

JOHN FEAST,
ap 24 3t* Florist & Seedsman.

FARMERS' REPOSITORY

OF AGRICTLTURAL IMPLEMENTS AND EASTMAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron rame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entire different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobacconists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Borland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c.

Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to wholesale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,
Pratt street, Baltimore,
feb 20 Between Charles & Hanover sts

A NEW-FOUNDLAND SLUT.

For sale, a large size New-Foundland Slut, of large size and very handsome. Her color is black. She is thoroughly broken to the gun, and in pup to a bull dog; price $20. Enquire of the editor of the Farmer and Gardener, Baltimore, Md. ap 17